# ETHYL CORPORATION

CORPORATE ENVIRONMENTAL AFFAIRS



March 20, 1986

PLEASE ADDRESS REPLY
TO: 451 FLORIDA BLVD
BATON ROUGE, LA. 70801



Mr. Steve Cunningham
Remedial Action Section
Site Assessment Unit
Stephen Mason Building
530 W. Allegan
Lansing, Michigan 48909

Dear Mr. Cunningham:

We recently learned from Ms. Virginia Loselle's February 19th memo to you that she recommends that Ethyl Corporation's Ferndale Laboratory property be considered for placement on the Michigan Sites of Environmental Contamination Proposed Priority List. The backup information for Ms. Loselle's request consisted of our environmental assessment of the property as transmitted to a potential owner, Oakland County, and a draft report by Neyer, Tiseo & Hindo, Ltd. (NTH), prepared under contract to the County.

We believe that your careful review of these reports will convince you that placement on the Michigan list is unwarranted, as we explain below.

The Ferndale Laboratory had an Interim Status Permit to store hazardous waste under RCRA, License #MID041803123. The facility was certified closed in February, 1984, in accordance with the closure plan approved by the USEPA, Region V. Beyond the terms of that plan, a thorough study was made to ensure that no environmental problems would remain when we left the property. That study, attached to Ms. Loselle's report, concluded that there was no significant contamination and has not been disputed. The sampling wells from which NTH obtained samples were installed as part of this study.

We have reviewed NTH's report in detail to learn what analyses and measurements they had and what could logically be concluded from them. The cover letter from Mr. Benedict Tiseo to his client, Mr. Joachim, contains a key appraisal of the investigation. Mr. Tiseo notes that the investigation was very limited in nature due to time constraints set by the Economic Development Group, and that only limited data could be obtained. The first visit to the property was on December 14, and the report was dated December 26 - a twelve-day span, which included the Christmas holidays and some bitterly cold days for a field investigation. The results, Mr. Tiseo noted, were "somewhat inconclusive" as to subsurface contamination at the site.

In addition to the general limitations of the NTH report, there are some specific areas of the report that must be rebutted. The tetrahydrofuran (THF) found in all of the well samples in concentrations from 0.04 to 0.4 ppm did not come from any buried deposits. The THF possibly came from the solvent

cement used to glue the well pipe sections together. THF is the nearly universal ingredient for PVC pipe cement, and these materials are approved for potable water service. THF is normally found in newly glued PVC water systems. In addition, although THF is listed as a hazardous material, it is so listed because of ignitability and not because of toxicity.

Although the THF concentrations were very small, they were about a hundred times higher than the other organics found and were the basis for the concerns that have been aroused. The other organic compounds identified were recognized as being present in de minimus concentrations. Chloroform is so widely distributed in the atmosphere and water that the source of the 1-5 parts per billion chloroform could be either local or background. In either case, there is no standard for it and there is no known adverse consequence to anyone. We understand that Detroit's municipal water system runs about 30 parts per billion chloroform.

In October, 1985, the USEPA proposed recommended maximum contaminant levels (RCMLs) for 37 chemical contaminants that could be harmful if found in the drinking water supplies at significant levels. EPA proposed that 2.0 parts per million was a significant level for toluene. These shallow monitoring wells are not in a drinking water supply; the 1-5 parts per billion toluene reported in one well does not denote any significant hazard.

In the "Findings" paragraphs of NTH's report on page 4, the statement is made that "the magnetic data would indicate that buried wastes of a metallic nature exist at the site". This statement is not justified by the test results. Mr. Tiseo's appraisal of the groundwater contamination, that the results were "somewhat inconclusive," is a much more accurate representation of the magnetic data.

The magnetometer readings taken in Area 1 generally depict a plane of magnetic intensity near 57,000 gammas. However, seven readings out of 115 readings showed 59,000 to 60,000 gammas. The misinterpretation here is that there is no magnetic slope and no intermediate readings. A buried metallic object large enough to elevate the intensity by 2,000 gammas should show some influence on the next reading on a fifty-foot grid and there was no such influence shown. This problem should have been solved during the field investigation with duplicate readings and tightening of the grid to find the slope if there is one. Note that we have no suspicion that anything was ever buried in Area 1.

The NTH report mentioned that metallic materials might exist within Areas 3 and 6, but did not include the data. We requested and received the results by telephone from Mr. Mark Sweatman.

The Area 3 investigation was a seven-point, 170-foot, traverse from south to north. Three readings, which varied by as much as 1,000 gammas, were made at each of the first five points because the magnetomer readings were so erratic. This erratic behavior was caused by an electrical disturbance. Buried, stationary metal invariably yields a steady signal. There is a 4,800 volt overhead electrical power line which parallels this traverse only fifty feet to the west of it. The power company's 4,800 volt feeder for the

Pinecrest neighborhood crosses the Laboratory property from west to east along the south edge of Area 1 and branches south at the edge of Area 3. We do not know at this point whether or not a meaningful magnetomer study is feasible in Area 3, but it is evident that no useful information has been obtained from the study completed. Again, we have no reason to believe that there are metallic objects buried in Area 3.

The Area 6 study was a seven-point, 340-foot, west to east traverse. The description given us indicates it zeroed at the AN Building wall and extended almost to the property line fence. The west and east readings were about 1,000 gammas lower than the others, probably reflecting the effects of the building and fence, but the other five were uniform and of the same intensity as the Area 1 background. The readings in this traverse look perfectly valid, and, if so, indicate that there is no buried metal in this area.

In summary, our own assessment indicated that all needed remedial action had been completed. Some of NTH's data substantiated this, and the remainder showed some obvious problems with the measurements themselves.

Our objective here is to resolve this matter in a responsible manner and as expeditiously as possible. After you have made your evaluation of the data, we would be pleased to meet with you and Ms. Loselle to answer any questions and satisfy everyone involved that there is no significatn hazard at this site and that there is no reason to include this site on the Michigan List.

Very truly yours,

D. E. Park
Director

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